

REMARKS

In the Office Action of October 6, 2004,¹ claims 1-29 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,694,235 to *Akiyama* (“*Akiyama*”) in view of U.S. Patent No. 6,526,460 to *Dauner* et al. (“*Dauner*”). Claims 1-29 remain pending, and Applicants address the rejection below.

Applicants traverse the rejection of claims 1-29 under 35 U.S.C. § 103(a) because a case for *prima facie* obviousness has not been established based on *Akiyama* and *Dauner*. To establish *prima facie* obviousness under 35 U.S.C. § 103(a), three requirements must be met. First, the applied references, taken alone or in combination, must teach or suggest each and every element recited in the claims. See M.P.E.P. § 2143.03 (8th ed. 2001). Second, there must be some suggestion or motivation, either in the reference(s) or in the knowledge generally available to one of ordinary skill in the art, to combine or modify the reference(s) in a manner resulting in the claimed invention. Third, a reasonable expectation of success must exist. Moreover, each of these requirements must “be found in the prior art, and not be based on applicant’s disclosure.” M.P.E.P. § 2143 (8th ed. 2001).

With regard to independent claim 1, *Akiyama* does not teach or suggest at least “routing, based on the destination address and an address map, the first message to a proxy logic element that performs functions associated with the destination module,” as claimed. In fact, the Examiner concedes that *Akiyama* fails to disclose routing the first message to a proxy element that performs functions associated with the destination module (Office Action “OA” at 3).

¹ The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether or not any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

Dauner does not cure the deficiencies of *Akiyama*. *Dauner* is directed to a vehicle communications system for a motor vehicle (Abstract). In alleging that *Dauner* discloses the claimed “routing,” the Examiner notes *Dauner*’s disclosure of equipment units in which application functions can be executed (OA at 3; col. 2, lines 1-12). The relied-upon portion of *Dauner* mentions that “the functions [are] executed within any desired equipment units.” The Examiner further alleges that *Dauner* “teaches that the modules can be part of any of the equipment units (1-11) and that the equipment units can support any number of modules” (OA at 3). According to *Dauner*, the “functions are executed within any desired equipment units.” (col. 2, lines 18-20; see also Fig. 3, col. 5, line 49 – col. 6, line 5). *Dauner* also mentions that different applications can be “operated from all of the equipment units embodied as operational locations” (col. 3, lines 25-27). The Examiner appears to equate *Dauner*’s application functions with the claimed “proxy logic” (OA at 3).

Neither the relied-upon disclosures, nor any other disclosure, in *Dauner* teaches or suggests the “routing” feature of claim 1. Contrary to the Examiner’s position, *Dauner*’s disclosure of application functions being executed within various equipment units does not teach or suggest “routing . . . the first message to a proxy logic element that performs functions associated with the destination module,” as claimed. *Dauner* merely discloses functional modularity, which allows tasks to be “distributed in the system” (col. 3, lines 50-52). In *Dauner*’s system, a message directed to a destination module is not routed to a proxy logic element that performs functions associated with the destination module. Even if *Dauner*’s system were to route messages, a message intended for a particular application function would be routed to the destination application function, not a proxy logic element for that function (or other program logic).

Accordingly, neither *Akiyama* nor *Dauner*, nor any combination thereof, teaches or suggests each and every feature of claim 1. As such, *prima facie* obviousness has not been established and the § 103(a) rejection of claim 1 should be withdrawn.

Moreover, *prima facie* obviousness has not been established at least because the requisite motivation to combine/modify *Akiyama* and *Dauner* is lacking. Determinations of obviousness must be supported by evidence on the record. *See In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001) (finding that the factual determinations central to the issue of patentability, including conclusions of obviousness by the Board, must be supported by “substantial evidence”). Further, the desire to combine references must be proved with “substantial evidence” that is a result of a “thorough and searching” factual inquiry. *In re Lee*, 277 F.3d 1338, 1343-1344 (Fed. Cir. 2002) (quoting *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52).

In this case, the Office Action does not show that a skilled artisan considering *Akiyama* and *Dauner*, and not having the benefit of Applicants’ disclosure, would have been motivated to combine or modify the references in a manner resulting in Applicants’ claimed combination. The Examiner, noting col. 1, lines 65-67 of *Dauner*, alleged that a skilled artisan would have modified *Akiyama* “because such modification would make the relay system of *Akiyama* readable extended and adapted to new tasks . . .” (OA at 3). This allegation in the Office Action is not properly supported and does not show that a skilled artisan would have combined the references as alleged. The mere fact that *Dauner* mentions achieving functional modularity (col. 1, lines 65-67) does not show that a skilled artisan would have been motivated to modify *Akiyama* as alleged.

Applicants call attention to M.P.E.P. § 2143.01, which makes clear that: “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious

unless the prior art also suggests the desirability of the combination” (citations omitted). The Office Action does not show that the cited art “suggests the desirability” of the alleged combination. Although *Dauner* mentions achieving functional modularity, it does not suggest the desirability of the alleged modification. Applicants submit that the conclusions in the Office Action were not reached based on facts gleaned from the cited references and that, instead, teachings of the present application were improperly used in hindsight to reconstruct the prior art. For at least these additional reasons, *prima facie* obviousness has not been established with respect to claim 1 and the rejection of that claim under 35 U.S.C. § 103(a) should be withdrawn.

Independent claim 7 recites, *inter alia*, “formatting [by a gateway] the message so that it can be processed by the destination module.” *Akiyama* does not teach or suggest at least this feature. Although *Akiyama* mentions routing data to various ECUs, it does not teach or suggest the claimed “formatting.” Furthermore, *Dauner* does not teach or suggest the “formatting” recited in claim 7. Although *Dauner* mentions software interfaces associated with application functions that convert data from other software interfaces into input parameters for their respective application functions, it does not teach or suggest formatting messages by a gateway so that the messages can be processed by a destination module, as claimed. Accordingly, the applied references, taken alone or in combination, do not teach or suggest each and every element recited in claim 7. The rejection of claim 7 under 35 U.S.C. § 103(a) should be withdrawn for at least this reason.

Similar to claim 1, independent claim 8 recites a combination including “routing, based on information in an address map, the first message to a proxy logic element that performs functions associated with the first destination module.” As explained, the cited art does not teach or suggest routing a message to a proxy logic element. As also explained, the requisite

motivation to combine or modify the cited references is lacking. Accordingly, although claim 8 is of different scope than claim 1, the § 103(a) rejection of claim 8 should be withdrawn for at least reasons similar to those presented above in connection with claim 1.

Independent claim 10 recites, *inter alia*:

means for selectively providing, using an address map, the at least one message to program logic that performs work machine control functions similar to the destination module that may be connected to the first data link to perform the same functions.

Although claim 10 is of different scope than claim 1, neither *Akiyama* nor *Dauner*, nor any combination thereof, teaches or suggests the above features for at least reasons similar to those presented above in connection with claim 1. In addition, for the reasons discussed above, the requisite motivation to combine or modify the cited references is lacking. The § 103(a) rejection of claim 10 should therefore be withdrawn.

Similar to claim 10, independent claim 11 recites, *inter alia*:

means for selectively providing, using an address map, the at least one message to program logic that performs work machine control functions similar to a destination module that may be connected to the first data link to perform the same functions.

As explained, the cited art does not teach or suggest routing or providing a message to a proxy logic element and the requisite motivation to modify *Akiyama* as alleged is lacking.

Accordingly, the § 103(a) rejection of claim 11 should be withdrawn for at least reasons similar to those presented above in connection with claim 10.

Independent claim 12 recites a combination including a “gateway” configured to “route the intercepted message, based on information in an address map, to the proxy logic, wherein the proxy logic performs functions associated with the destination module.” As explained, the cited art does not teach or suggest routing a message to a proxy logic element. In addition, as explained, the requisite motivation to modify *Akiyama* as alleged is lacking. Thus, although

claim 12 is of different scope than claim 1, the § 103(a) rejection of claim 12 should be withdrawn for at least reasons similar to those presented above in connection with claim 1.

Independent claim 19 recites a combination including

a gateway coupled to the first data link and configured to . . . when the destination address is found in the address map, route, based on information in the address map, the first message to a proxy logic element that performs functions associated with the destination module, wherein the proxy logic element is located in the gateway.

As explained, the cited art does not teach or suggest routing a message to a proxy logic element.

Further, as explained, the requisite motivation to modify *Akiyama* as alleged is lacking. The § 103(a) rejection of claim 19 should therefore be withdrawn.

Independent claim 26 recites a combination including, “a master controller remotely located with respect to the work machine and coupled to the work machine via a wireless data link, wherein the master controller is configured to control the modules.” Contrary to the Examiner’s position, *Akiyama* does not teach or suggest at least this feature. Although, as the Examiner notes, *Akiyama* discloses “access from outside the vehicle,” it does not teach or suggest a “master controller,” as claimed (OA at 3, col. 7, lines 58-67).

Dauner does not cure the deficiencies of *Akiyama*. *Dauner* does not teach or suggest “a master controller remotely located with respect to the work machine and coupled to the work machine via a wireless data link, wherein the master controller is configured to control the modules,” as recited in claim 26. *Dauner* merely discloses a functionally modular vehicle communications system. Accordingly, neither *Akiyama* nor *Dauner*, nor any combination thereof, teaches or suggests each and every feature of claim 26. For at least this reason, the § 103(a) rejection of claim 26 should be withdrawn. In addition, for the reasons discussed above in connection with claim 1, the requisite motivation for combining or modifying the cited art is lacking.

Similar to claim 26, independent claim 27 recites combination including:

a master controller remotely located with respect to the work machine and coupled to the work machine via a wireless data link, wherein the master controller is configured to control the modules.

For at least the reasons presented above in connection with claim 26, the rejection of claim 27 under 35 U.S.C. § 103(a) should be withdrawn. In addition, claim 27 recites, *inter alia*: a “gateway” configured to “route the intercepted message, based on information in an address map, to proxy logic, wherein the proxy logic performs functions associated with the master controller.” Neither *Akiyama* nor *Dauner*, nor any combination thereof, teaches or suggests this recitation. These references do not teach or suggest routing an intercepted message to proxy logic, let alone to proxy logic that “performs functions associated with the master controller.” For this additional reason, the rejection of claim 27 should be withdrawn.

Independent claim 28 recites, *inter alia*, “routing, based on information in an address map, the first message to a proxy logic element that performs functions associated with the first destination module.” Independent claim 29 recites, *inter alia*, “selectively providing, using an address map, the at least one message to program logic that performs work machine control functions similar to the destination module that may be connected to the first data link to perform the same functions.” As explained above, the cited art does not teach or suggest routing or providing a message to a proxy logic element and the requisite motivation to modify *Akiyama* as alleged is lacking. Accordingly, the rejection of claims 28 and 29 under 35 U.S.C. § 103(a) should be withdrawn.

Claims 2-6 depend upon claim 1; claim 9 depends upon claim 8, claims 13-18 depend upon claim 12, and claims 20-25 depend upon claim 19. The rejection of claims 2-6, 9, 13-18 and 20-25 should be withdrawn for at least reasons similar to those presented above in connection with claims 1, 8, 12 and 19, respectively.


The claimed invention is neither anticipated nor rendered obvious in view of the art cited against this application. Applicants request the Examiner's reconsideration of the application in view of the foregoing, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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